

# ColorEdge<sup>®</sup> PROMINENCE CG3145



### Specifications

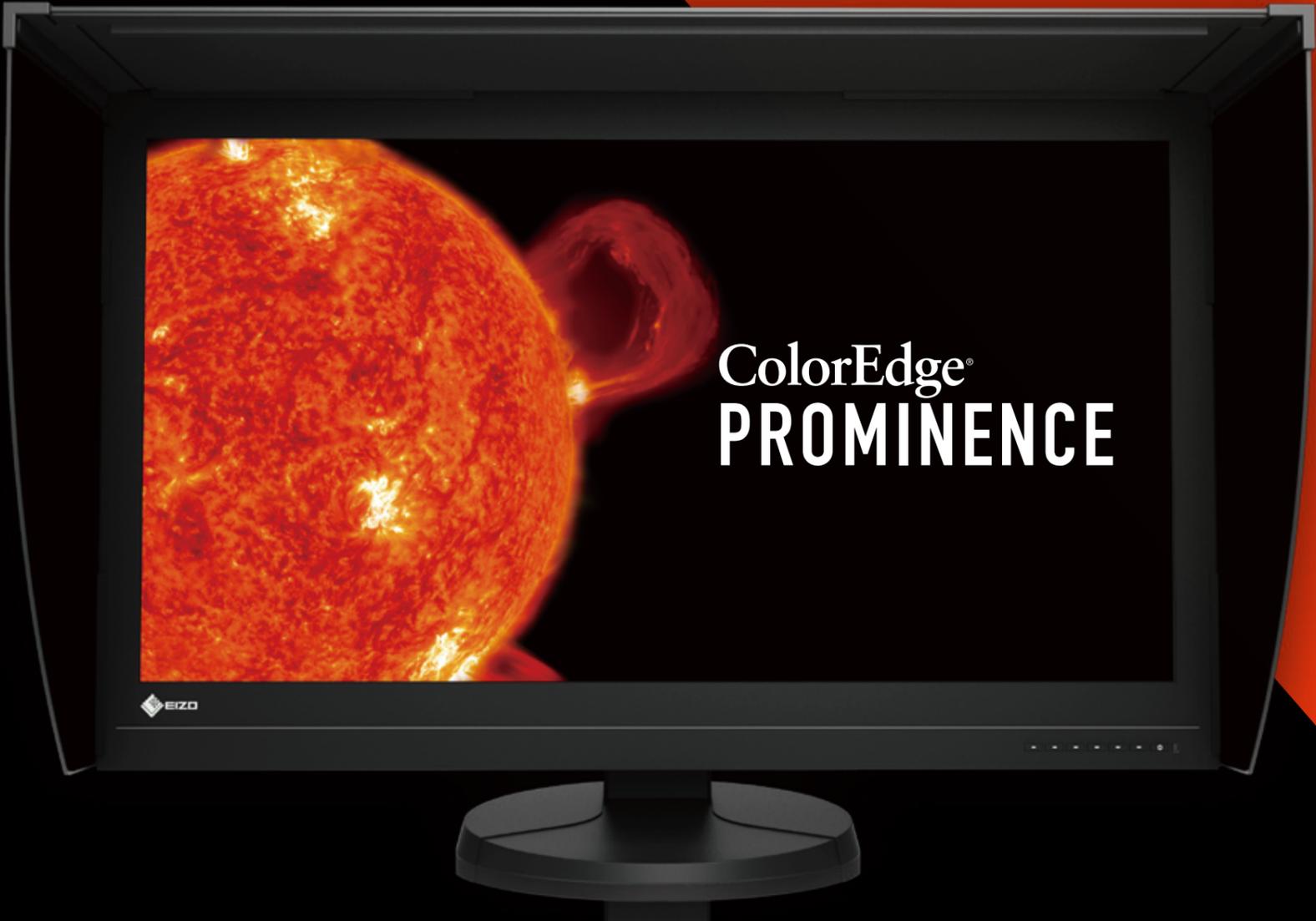
Cabinet Color	Black
Panel Type	IPS
Panel Size	31.1" / 79 cm (789 mm diagonal)
Native Resolution	4096 × 2160 (1.9:1 aspect ratio)
Viewable Image Size (H × V)	698 × 368.1 mm
Pixel Pitch	0.170 × 0.170
Pixel Density	149 ppi
Grayscale Tones	DisplayPort, HDMI: 1024 tones (a palette of 16.76 million tones)
Display Colors	DisplayPort, HDMI: 1.07 billion from a palette of 278 trillion
Viewing Angles (H / V, typical)	178°, 178°
Brightness (typical)	1000 cd/m <sup>2</sup>
Contrast Ratio (typical)	1,000,000:1
Response Time (typical)	9 ms (gray-to-gray)
Wide Gamut Coverage (typical)	Adobe RGB: 99%, DCI-P3: 98% (TBD), Rec. 2020: 80% (TBD)
Input Terminals	DisplayPort × 2 (with HDCP), HDMI (with HDCP, Deep Color)
USB Function	1 port for monitor control, 3-port USB hub
USB Standard	USB 3.0
Preset Modes	Color Mode (REC2020, REC709, DCI, PQ_REC709, PQ_DCI, HLG_REC2020, PQ_CAL, HLG_CAL, Calibration)

# HDR

High Dynamic Range

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# HDR

High Dynamic Range

## What is HDR?

HDR (High Dynamic Range) is a range that approximates the human perception of color and light as content is shown on a display device. A monitor which supports HDR is able to correctly show both very bright and very dark areas on the screen without sacrificing the integrity of either. With lower-range SDR (Standard Dynamic Range) monitors, brightness, contrast, and color are lost when displaying HDR content.



SDR Monitor



EIZO HDR Monitor

## ColorEdge<sup>®</sup> PROMINENCE CG3145



## Gamma Curves

There are two gamma curves used for HDR video – hybrid log-gamma (HLG) and perceptual quantization (PQ) curve. HLG is compatible with SDR displays and is suitable for live television broadcasting. PQ curve approximates the human visual system in terms of color and light perception, making it ideal for films, streaming, and other video content. Both gamma curves were standardized by the International Telecommunication Union (ITU) as ITU-R BT.2100. In addition, the PQ curve was standardized by the Society of Motion Picture and Television Engineers (SMPTE) as ST-2084. ColorEdge PROMINENCE CG3145 supports both HLG and PQ curves.

## EIZO HDR Technology

EIZO's HDR reference monitor, ColorEdge PROMINENCE CG3145, is the first monitor to overcome the severe drawbacks of other HDR technologies that are available in the market today so it can be used reliably for post production work.

Auto Brightness Limiter (ABL) is equipped in other HDR OLED monitors and limits the monitor's ability to display lighter scenes with tones over a specific range in order to prolong the device's lifetime. This causes those light areas to appear dimmer and the color duller as a result. Local dimming uses an area control backlight system which adjusts the brightness in sections of the screen depending on the content displayed. However, when an object on the screen falls outside of the area of the backlight that is adjusted, a "halo" effect appears, making it impossible to achieve full color accuracy in smaller details.

EIZO's ColorEdge PROMINENCE CG3145 achieves a true HDR visual experience without ABL or the "halo" effect to ensure you always see accurate colors and brightness in every pixel.

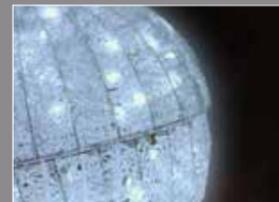
HDR Monitor with ABL



ColorEdge PROMINENCE CG3145



HDR Monitor with Local Dimming



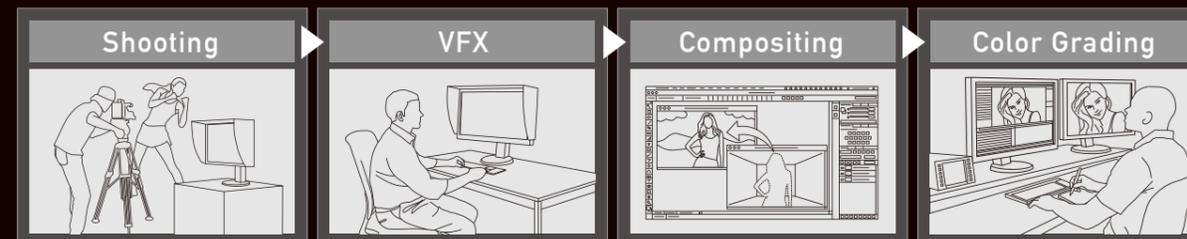
ColorEdge PROMINENCE CG3145



*Images are for illustrative purposes only.*

## HDR Workflow

In addition to the ColorEdge PROMINENCE CG3145 HDR reference monitor, EIZO offers optional HLG and PQ curves for many of its current CG Series monitors. The optimized gamma curves render images to appear more true to how the human eye perceives the real world compared to SDR. These products will support the HDR workflow from shooting to color grading.



| Shooting<br>VFX<br>Compositing<br>Color Grading                                       |
|---|---|---|---|---|
|  |  |  |  |  |
| CG247X 24.1"  | CG277 27"   | CG248-4K 23.5"  | CG318-4K 31.1"  | CG3145 31.1"  |
| 1920 x 1200   | 2560 x 1440   | 3840 x 2160   | 4096 x 2160   | 4096 x 2160   |

Color Management Monitors with HDR Support

HDR Reference Monitor

## True HDR

ColorEdge PROMINENCE CG3145 achieves the 1000 cd/m<sup>2</sup> high brightness level needed for HDR content display. It also offers a contrast ratio in excess of 1,000,000:1 for displaying true blacks. The monitor supports the HLG and PQ gamma curves for HDR without ABL so images are displayed with the correct color and brightness for a true HDR visual experience.

## DCI 4K Resolution

ColorEdge PROMINENCE CG3145 displays the DCI-4K standard (4096 × 2160) which is more than four times that of full HD (1920 × 1080). It's ideal for creating, editing, and referencing with 2D and 3D CGI, VFX, compositing, and color grading.

# DCI 4K

4096 × 2160



# ColorEdge® PROMINENCE CG3145



### Centralized Color Management

ColorEdge PROMINENCE supports EIZO's unique ColorNavigator NX quality control software. It offers quality control and asset management of client ColorEdge monitors. To suit the needs of a specific project, you can change the brightness, gamma, and white point settings of the monitor's preset color modes and calibrate to the new values. The calibration information is saved directly to the monitor.

### ColorNavigator™ NX



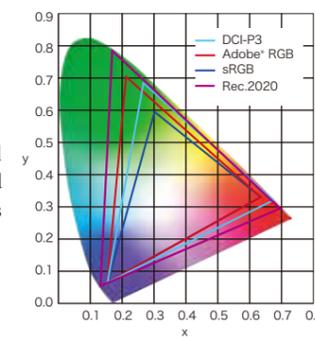
### Video Compatibilities

ColorEdge PROMINENCE CG3145 supports various video formats including HDMI 2.0 compatible with 10-bit 4:2:2 at 50/60p. DisplayPort supports up to 10-bit 4:4:4 at 50/60p.

### Wide Color Gamut

The wide gamut faithfully reproduces 98% of DCI-P3 and 80% of Rec. 2020 standards used in post production. This ensures the colors are reproduced according to industry standards.

*Final figure TBD.*



### 10-Bit Simultaneous Display

With 10-bit simultaneous display\* from a 24-bit look-up-table (LUT), ColorEdge PROMINENCE CG3145 can show more than one billion colors simultaneously. This results in smooth color gradations and reduced Delta-E between two adjacent colors.

*\*A graphics board and software which support 10-bit output are also necessary for 10-bit display.*

### Multiple Inputs

With a single cable, the DCI-4K resolution at 60 Hz is supported by both DisplayPort inputs and at HDMI inputs.

### Light-Shielding Hood

The monitor comes bundled with a shading hood that effectively prevents glare on the screen caused by ambient lighting. The hood attaches magnetically for quick and easy setup.

